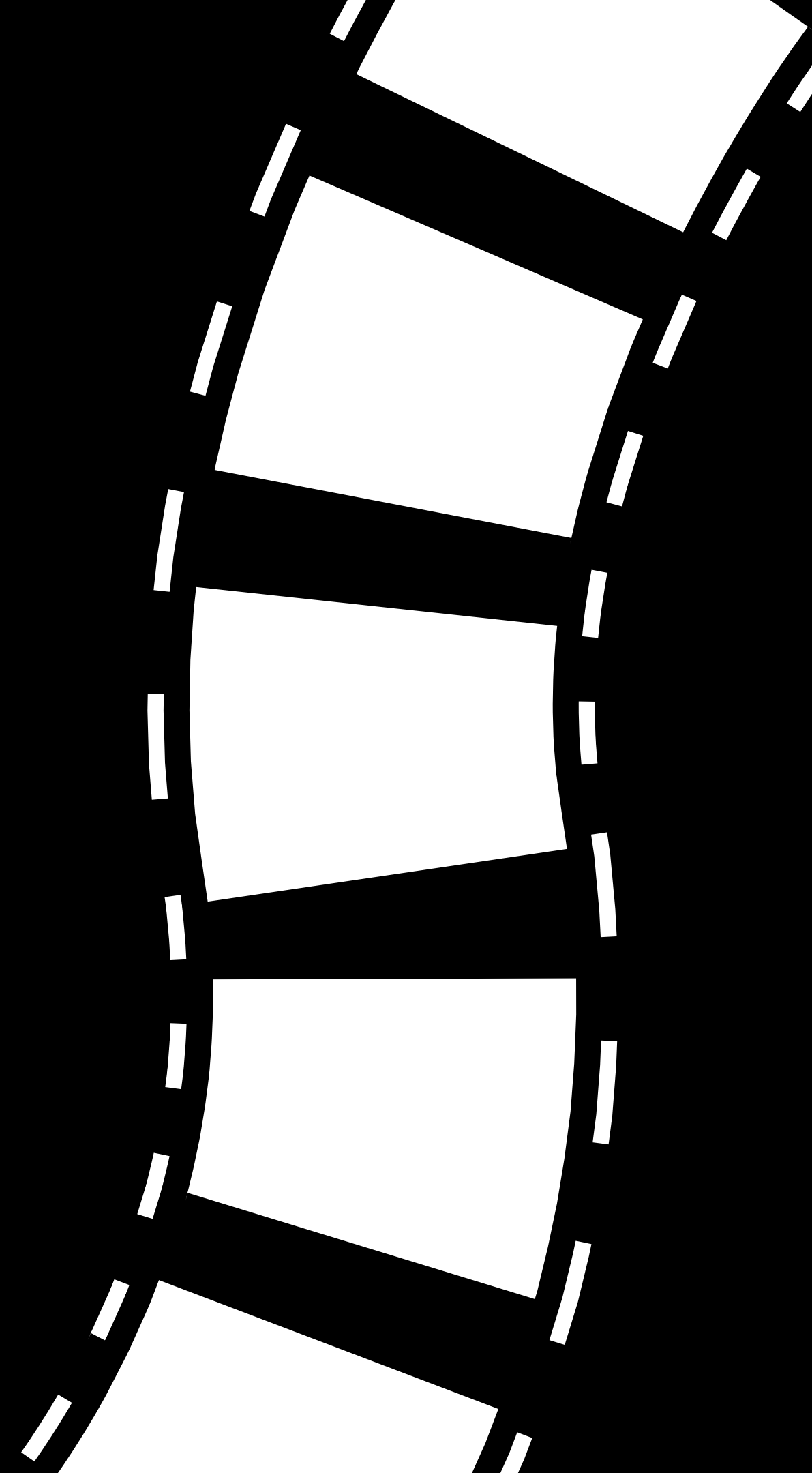# CineSense

Decoding Audience Insights,
Shaping Better Films

Business & Project Management

21 February 2025

**Martina Fabiani
Tommaso Falaschi
Rossana Antonella Sacco**

Overview

Introduction

The Need

In an industry where **audience reception** can make or break a movie, under- standing viewer sentiment is crucial. **CineSense** processes large volumes of user- generated feedback, identifying trends, strengths, and potential weaknesses.

The Idea

By integrating advanced **Large Language Models** (LLMs) and **sentiment analysis** techniques, CineSense analyzes audience reviews to extract valuable insights into the key factors that drive a film's success, tailored to its specific genre.

The Problem

While similar methodologies have been developed, their practical application remains limited in real-world scenarios.

Failure Cases

The failures of tones of projects highlight how a **lack of audience understanding** and ineffective strategic planning can significantly contribute to a **film's downfall**.

Our Goal

Our goal is to develop a solution that helps prevent pitfalls by equipping industry professionals with **AI-driven tools** to optimize decision-making. By leveraging advanced **sentiment analysis** and **feedback interpretation techniques**, our approach ensures that films are not only creatively compelling but also strategically aligned with audience preferences, **increasing their chances of success**.

The Innovation

CineSense revolutionizes audience analysis by leveraging cutting-edge **AI** and Natural Language Processing (**NLP**) to decode movie reviews with precision.

From Data to Actionable Insights

Traditional methods struggle to interpret large-scale audience feedback effectively. CineSense bridges this gap by integrating:

✅ *Sentiment Analysis* – Capturing emotional responses with high accuracy

✅ *Topic Extraction* – Identifying key themes and concerns in reviews

✅ *Marketing Insights* - Turning sentiment analysis, keyword extraction, and topic modeling into actionable strategies.

Gemini-1.5-Flash

Utilizing **the Gemini Long Context API,** CineSense processes vast datasets efficiently, maintaining context over extended reviews and delivering deep and strategic insights.

🔷 High-speed, cost-effective large-scale analysis

🔷 Context-aware processing for nuanced sentiment detection

🔷 Enhanced decision-making for filmmakers and marketers

Dataset

Dataset Overview

- The dataset contains user reviews from three major film genres: Action , Drama , and Comedy .

- Each review is enriched with metadata: creation date, sentiment score, film title, runtime, genre, and language.

- Data was merged with film metadata to ensure each review was correctly categorized by genre.
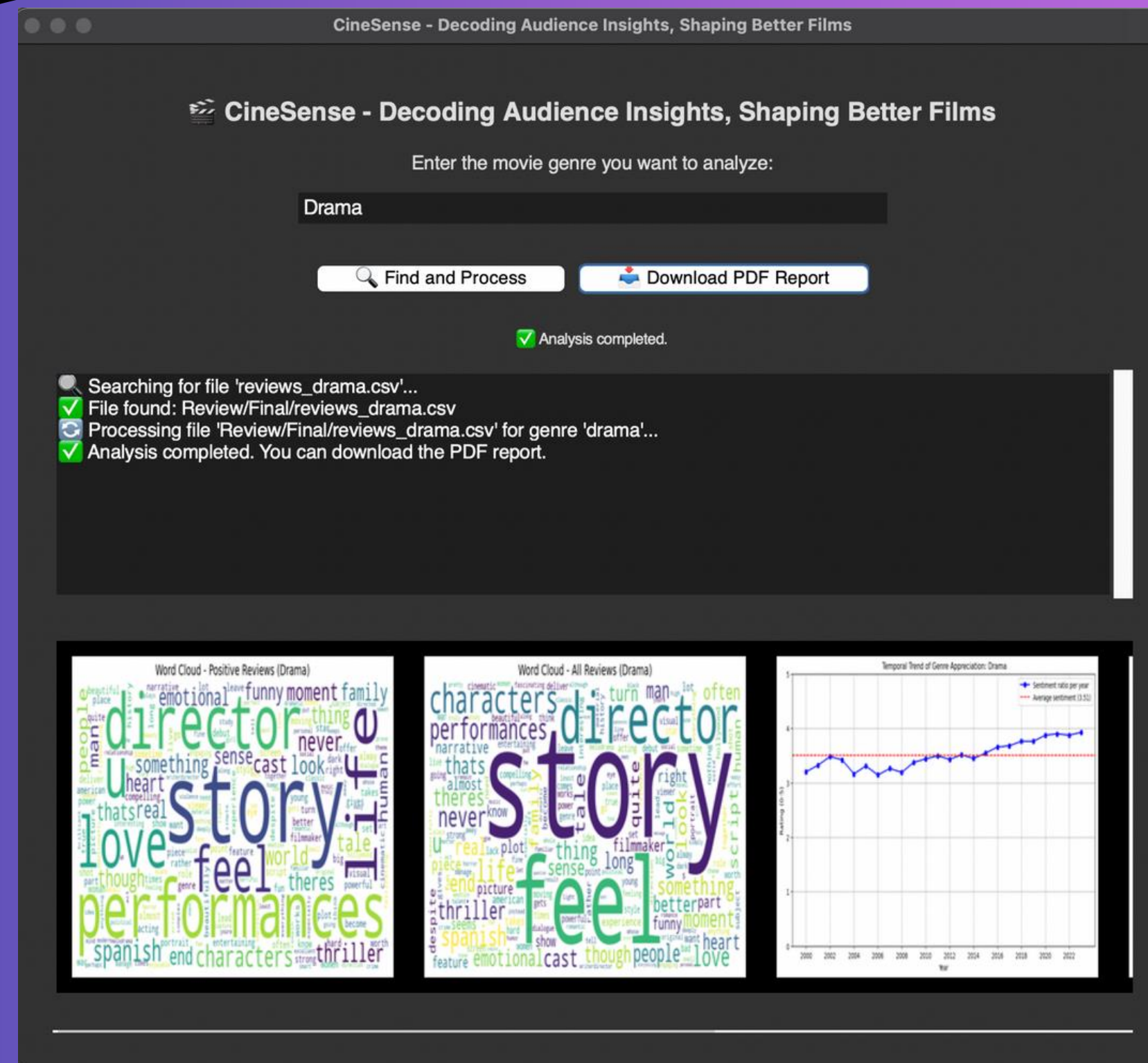
Dataset Processing

Data Cleaning
- Removal of special characters, emojis, and foreign letters.
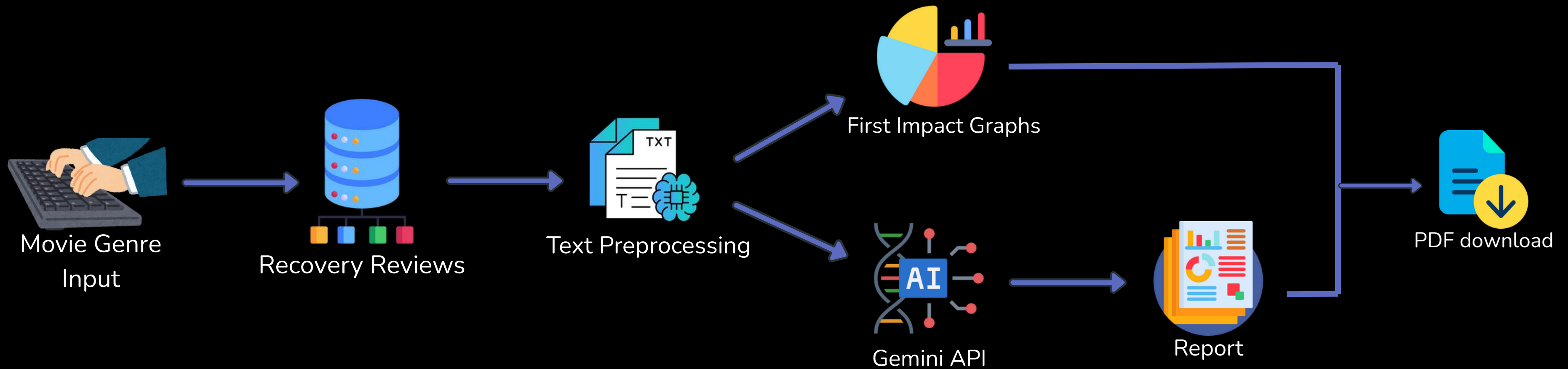- Standardization of text by replacing abbreviations and internet slang.

Tokenization
- Transformation of reviews into structured word tokens for further analysis.
- Processed tokens were used to generate word cloud visualizations.

The Application

Workflow

Movie Genre Input → Recovery Reviews → Text Preprocessing → First Impact Graphs / Gemini API → Report → PDF download

Results

Our **sentiment analysis**, powered by Gemini AI, achieved high accuracy: 93% for Drama, 97% for Comedy, and 89% for Action. The model effectively captures audience sentiment across different genres.

Topic extraction revealed key insights: Drama reviews focus on emotional depth and pacing, Action movies on intensity vs. predictability, and Comedy films on humor consistency. These findings help studios refine storytelling, marketing, and audience engagement.

CineSense analyzes audience sentiment and key themes in reviews, helping filmmakers refine storytelling, enhance production, and tailor marketing strategies. With AI-driven sentiment analysis and topic modeling, it provides data-driven insights to optimize a film's success.

Conclusions

1

AI-Driven Sentiment Analysis

CineSense leverages advanced LLMs to accurately analyze audience sentiment across different film genres, achieving high validation accuracy and providing filmmakers with valuable insights into audience perception.

2

Topic Extraction & Strategic Insights

By identifying key discussion topics in reviews, CineSense helps studios understand what resonates with viewers and what needs improvement, supporting better storytelling and production choices.

3

Business & Marketing Impact

The AI-generated reports offer data-driven recommendations that enable filmmakers, producers, and marketers to refine their marketing strategies, optimize audience engagement, and maximize a film's commercial success.

Thank you

**Martina Fabiani
Tommaso Falaschi
Rossana Antonella
Sacco**